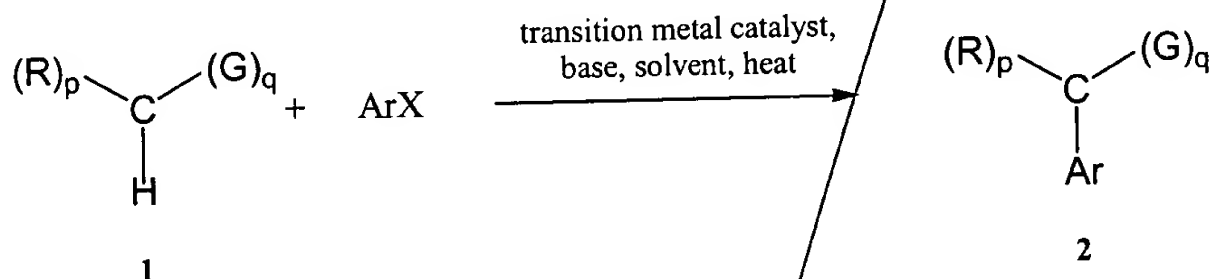


Clean Version of Amended Claims

1. (amended) A method represented by Scheme 1:



Scheme 1

wherein

G represents, independently for each occurrence, an electron withdrawing group selected from the group consisting of formyl, acyl, -C(O)OR, -C(O)NR<sub>2</sub>, nitro, nitroso, -S(O)<sub>2</sub>R, -SO<sub>3</sub>R, -S(O)<sub>2</sub>NR<sub>2</sub>, -C(NR)-R, -C(NOR)-R, and -C(NNR<sub>2</sub>)-R;

R represents, independently for each occurrence, hydrogen, alkyl, aryl, heteroalkyl, heteroaryl, halogen, alkylamino, arylamino, alkylthio, arylthio, alkoxy, aryloxy, or -(CH<sub>2</sub>)<sub>m</sub>-R<sub>g</sub>;

Ar represents an aromatic or heteroaromatic moiety;

X represents halogen, -OTf, -ONf, -OTs, -OMs, (alkyl)S(O)<sub>2</sub>O-, or (aryl)S(O)<sub>2</sub>O-;

the transition metal catalyst consists essentially of a Group VIIIA metal; and at least one non-chelating ligand;

base represents a Bronsted base;

R<sub>g</sub> represents independently for each occurrence a substituted or unsubstituted aryl, cycloalkyl, cycloalkenyl, heterocycle or polycycle;

m, independently for each occurrence, is an integer selected from the range 0 to 8 inclusive;

q is an integer selected from the range 1 to 3 inclusive; and

p is an integer equal to (3-q).

3. (amended) The method of claim 1, wherein said at least one non-chelating ligand is an asymmetric ligand; and the reaction produces a non-racemic mixture of a chiral compound 2.

4. (amended) The method of claim 1, wherein the Group VIIIA metal is palladium, platinum, or nickel.

5. (amended) The method of claim 4, wherein the Group VIIIA metal is palladium.